

Claims

1. Filter element, especially for use in backflush filter devices, with a filtration part through which a fluid which has contaminants can flow at least in one direction (24), there being a capture device (62) which has at least one rod-like permanent magnet or electromagnet (64) which removes magnetizable, especially ferritic portions, at least partially from the fluid before it flows through the filtration part, there being a stripping means (68) for removal of the indicated portions from the capture device (62), characterized in that the stripping means (68) is formed from a stripping ring (70) which as it moves along the rod-shaped magnet (64) removes the portions which are held by the capture device (62) and that when the filtration part is being backflushed the stripping ring (70) moved by the fluid flow effects stripping of the portions which are held on the capture device (62).
2. The filter element as claimed in claim 1, wherein the respective rod-like magnet (64) extends along the longitudinal axis of the filtration part.
3. The filter element as claimed in claim 1 or 2, wherein the stripping means (68) is active while there is no current in the respective electromagnet.
4. The filter element as claimed in one of claims 1 to 3, wherein the filtration part is made conical and wherein the structural length (L) is at least ten times greater than the largest existing passage cross section (D) for the fluid.
5. The filter element as claimed in one of claims 1 to 4, wherein it is made as a slotted hole screen tubular filter element.

6. The filter element as claimed in one of claims 1 to 5, wherein the capture device (62) extends along that half of the filtration part at which the fluid enters and where the greatest passage cross section (D) for the fluid flow prevails.
7. The filter element as claimed in one of claims 1 to 6, wherein the stripping ring (70) annularly encloses the rod-like magnet (64) loosely and in the rest position is located on its base part and in the position of use assumes an axial distance to this rest position along the magnet (64).
8. The filter element as claimed in one of claims 1 to 7, wherein the stripping ring (70) can be moved between two stops (72) between which the rod-like magnet (64) extends.